

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 102)

FOIL the expressions shown below:

1. $(7x - 3)(-9x - 6)$

$$\begin{aligned} & (7)(-9)x^2 + (7)(-6)x + (-3)(-9)x + (-3)(-6) \\ & (-63)x^2 + (-42)x + (27)x + (18) \\ & -63x^2 - 15x + 18 \end{aligned}$$

2. $(4x - 7)(5x + 3)$

$$\begin{aligned} & (4)(5)x^2 + (4)(3)x + (-7)(5)x + (-7)(3) \\ & (20)x^2 + (12)x + (-35)x + (-21) \\ & 20x^2 - 23x - 21 \end{aligned}$$

3. $(8x - 6)(-5x + 7)$

$$\begin{aligned} & (8)(-5)x^2 + (8)(7)x + (-6)(-5)x + (-6)(7) \\ & (-40)x^2 + (56)x + (30)x + (-42) \\ & -40x^2 + 86x - 42 \end{aligned}$$

4. $(-4x - 3)(8x - 8)$

$$\begin{aligned} & (-4)(8)x^2 + (-4)(-8)x + (-3)(8)x + (-3)(-8) \\ & (-32)x^2 + (32)x + (-24)x + (24) \\ & -32x^2 + 8x + 24 \end{aligned}$$

5. $(-9x - 2)(5x - 7)$

$$\begin{aligned} & (-9)(5)x^2 + (-9)(-7)x + (-2)(5)x + (-2)(-7) \\ & (-45)x^2 + (63)x + (-10)x + (14) \\ & -45x^2 + 53x + 14 \end{aligned}$$

FOIL the expressions shown below:

6. $(8x - 3)(-7x - 6)$

$$\begin{aligned}(8)(-7)x^2 + (8)(-6)x + (-3)(-7)x + (-3)(-6) \\ (-56)x^2 + (-48)x + (21)x + (18) \\ -56x^2 - 27x + 18\end{aligned}$$

7. $(2x + 2)(-3x + 9)$

$$\begin{aligned}(2)(-3)x^2 + (2)(9)x + (2)(-3)x + (2)(9) \\ (-6)x^2 + (18)x + (-6)x + (18) \\ -6x^2 + 12x + 18\end{aligned}$$

8. $(-2x + 5)(3x - 9)$

$$\begin{aligned}(-2)(3)x^2 + (-2)(-9)x + (5)(3)x + (5)(-9) \\ (-6)x^2 + (18)x + (15)x + (-45) \\ -6x^2 + 33x - 45\end{aligned}$$

9. $(-8x - 9)(4x + 7)$

$$\begin{aligned}(-8)(4)x^2 + (-8)(7)x + (-9)(4)x + (-9)(7) \\ (-32)x^2 + (-56)x + (-36)x + (-63) \\ -32x^2 - 92x - 63\end{aligned}$$

10. $(6x + 8)(4x - 3)$

$$\begin{aligned}(6)(4)x^2 + (6)(-3)x + (8)(4)x + (8)(-3) \\ (24)x^2 + (-18)x + (32)x + (-24) \\ 24x^2 + 14x - 24\end{aligned}$$